ENDING THE LEGACY OF WAR: LONG-TERM SOLUTIONS TO HUMANITARIAN DEMINING IN PEACE OPERATIONS

A MONOGRAPH
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ABSTRACT

ENDING THE LEGACY OF WAR: LONG-TERM SOLUTIONS TO HUMANITARIAN DEMINING IN PEACE OPERATIONS by MAJ John D. Nelson, USA, 40 pages.

This monograph discusses the importance of planning for long-term demining in the early stages of a peace operation. Planning and coordinating for the long-term demining of a nation emerging from conflict will be critical to the success of the rebirth of that society economically, politically, socially, and psychologically. Unless there is a long-term self-sustaining solution to deal with the legacy of war, the landmine, all efforts involved with redevelopment may be wasted.

The monograph explores how landmines present a complex multi-faceted problem to the nation emerging from conflict. The landmine will effect the redevelopment of the nation economically. This will be especially true for nations that have agrarian based economies. The landmine will affect the psychosocial healing of a nation, meaning that for a nation to heal itself psychologically from war the threat to personal security must be removed. As long as landmines remain under the lands of a nation rebuilding a shattered society cannot fully take place.

United States and United Nations policy concerning humanitarian demining was examined. The United States policy is in place from the President and the Congress to provide assistance to nations involved in demining their nations. The nation must be willing to help itself and must accept United States assistance. The United Nations policy regarding humanitarian demining has been to include this as a task in the mandate of the peacekeeping forces. However, the United Nations does not have policy in place to ensure the success of long-term demining.

The requirements to secure international resources, both financial and technical was developed. Many International Organizations will be involved in raising capital to demine a nation, to include the World Bank. Non-Governmental Organizations will provide a tremendous amount of technical expertise to leverage the scarce resources available to the nation afflicted with the landmine contamination. The Non-Governmental Organization's and International Organizations involved with providing resources to demine should be brought in early in the peace operation to help develop the demining campaign plan.

Finally, a case study about long-term demining in Cambodia was used to examine the ideas developed in the earlier sections. The lessons learned by deminers in Cambodia are, a campaign plan should be established with all those responsible for demining, and that a coordinating agency should be established early to prioritize demining.

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I. Introduction

"After troops withdraw, landmines remain in the ground as brutal reminders that successful peace-building and development are still beyond the horizon." Boutros Boutros-Gali

Landmines have been the weapon of choice by belligerent forces in inter-state and intra-state conflict in the developing world during the last twenty years. As these regions emerge from conflict and enter into the journey of rebuilding their societies, landmines will present a lasting legacy of war. For the successful rebirth of the region the legacy of landmines must be removed. Yet the problem presented by the landmine is a complex one that will affect every aspect of a society over several generations.

The problem of landmines will affect a region rebuilding its society, after conflict, in many complex interconnected ways. Most states in the developing world rely on agriculture as a basis for their economy. If the fields in which crops and animals are raised are contaminated with landmines, not only will the economy be devastated, but the farmers working the fields may become casualties, burdening an already overburdened health care system. Once the farmers and their families realize it may be hazardous to their health to work their fields they will migrate to the cities placing additional demands on already overpopulated urban areas within the region. One action leads to many interconnected effects that have unintended detrimental consequences to the region's process of rebirth. If the region is to be successful in its process of rebuilding the landmine threat will need to be eliminated. This will probably start as soon as the guns fall silent and the peace forces are in place.

Demining will be essential to enable the redevelopment of a region emerging from conflict. Removal of the landmines from key infrastructure such as roads, bridges, and railroads will be essential to return freedom of movement to the local population and to international organizations and other organizations involved in redevelopment. Then mines will need to be removed from homes, villages, water sources, and schools so that displaced population may return to the regions they fled during the conflict. Landmines should then be removed from agricultural areas, and the remainder of the country. Removing the landmines will not only have an impact on the redevelopment of the society but a psychological impact by reducing the fear and trauma caused by the presence of landmines among the civilian population.

Military forces, operating as part of a peace operation, in a region infested with landmines, may be called on to solve the problem. In the initial period of the peace operation that may be the best approach, since the peace forces will need to clear landmines from key pieces of infrastructure, such as, roads, railroads, and bridges in order to successfully complete its mission. However, in the long term, once the military component of the peace operation has gone, using the military to demine a region, that is to remove all mines, may not be the best solution to remove the landmine threat. The optimal long term solution, realizing that it may take as long as 60 years to remove all landmines from a region, may be to develop a local demining capability.

Developing a local demining capability will require the cooperation of the local and regional governments. This will require coordination of actions and sharing of information. Realizing that in some regions there may not be a governmental body in

place to create a local solution. The key to any long term solution to the landmine problem in a region will be to involve the local and regional governments in the development of, and to assume ownership of the demining program.

Non-Governmental Organizations will play a large role in the long-term solution to the landmine problem in a region. They bring expertise in demining, a passion and vitality to the cause that most governmental bodies find hard to replicate. They can help establish a local demining program through the training of local deminers, educating the local population of the dangers of landmines, treating and rehabilitating civilians injured by landmines, and providing information on the location and composition of minefields within the country. However, to expect the Non-Governmental Organization community to take on the entire burden of the landmine crisis in a region will demand too much of their capability. Non-Governmental Organizations should be given a focus, or a priority on their tasks they are asked to perform, and will probably require some type of funding stream since most Non-Governmental Organizations fund their operations through donations that are highly variable from year to year.

Landmines will present a complex problem that will not go away in a few years or even a few decades. In order for the local demining program to be successful it must be self sustaining over the period of years required to remove all the landmines. This will be expensive since it costs about \$300-1000² to remove one landmine. This may require some form of international aid, or loan, arranged by the international financial community. This will require some type of intervention or direction by the international diplomatic community to arrange for donor nations, and to arrange the terms of the loan through the

international financial institution. This will also require some organization on the ground in the afflicted region able to work with the international lending institution to provide estimates of the extent of the problem and efforts taken so far to solve the problem. The United States will play a major role in the financial solution to the landmine problem. In addition to the financial role, all elements of the power of the United States will be involved, diplomatic, informational, military, and economic.

What role will the United States military play in the solution of the landmine problem in a region? The President has directed the Department of Defense to increase its efforts in assisting other nations in the removal of landmines from their lands³ What does this mean? How should the United States military be involved in the effort to remove landmines? In the early stages of a peace operation the United States military may be more directly involved in the removal of mines from a region, for force protection reasons, to assist in the reestablishment of freedom of movement, and to restore essential infrastructure. However, the landmine problem will be with a region for many years. United States forces will probably move on after a few years. Therefore, how does a United States force, involved in a peace operation, transition a short-term demining program to a long-term demining program?

The United States military will probably not have the lead in establishing long-term redevelopment programs. It may be one of many agencies working with the United Nations or some other international body, such as the Office of the High Representative in Bosnia. Therefore the question of how to transition the short-term demining program may be dictated by the international diplomatic community and our National Command

Authority. Perhaps the real question that needs to be answered is, should the United States military be involved in the coordination of long-term humanitarian demining associated with peace operations. With this question answered, then the question of how to transition to the long term demining program will be self evident.

This monograph will examine the question as to whether the United States military should be involved in the coordination of long-term humanitarian demining associated with peace operations. In order to answer the question the following areas will be examined: the long-term effects of landmines on the redevelopment of a state, how demining will assist the long-term development of a nation, what the role of the military is in long term demining, what the role of the Non-Governmental Organization is in demining, what the role of the international financial institutions is in demining, and finally who should be responsible for the overall solution the landmine problem in a region. The ideas developed in the monograph will be examined using the development of a long-term demining program in Cambodia after the United Nations Transition Authority Cambodia (UNTAC) departed.

II. The Nature of the Landmine Problem

"Mines not only maim and kill, they also render large tracts of land uninhabitable with a loss of livlihood for millions. Once the fighting ends, refugees and internally displaced often fear returning to their farms or villages because of the mines. Many returning refugees gather in cities and towns where they will find little work and poor housing. In the meantime, mine clearing operations, particularly in hilly terrain, may take years and even decades to complete." International Committee of the Red Cross⁴

The use of the landmine across the globe, in conventional and unconventional conflicts, has created a problem, for the nations afflicted with landmine contamination, and for the international community, that will not be resolved quickly. Landmines will effect every facet of a society, in terms of human suffering, economic instability, and social upheaval. The solution to the problem, and the time required to solve the problem, will largely be determined by the efforts of the nations afflicted, and the international community working together. In order to search for long-term solutions to the problem presented by the lasting legacy of landmines the scope and nature of the problem must first be defined.

Landmines have been used widely in conflict from the beginning of World War II.

Estimates of the number of landmines deployed since that period to the present time are
over 400 million.⁵ The number of uncleared landmines across 62 countries is around 100
million.⁶ Chances are that if a nation or region has been involved in a conflict it will have a
problem with landmines.

The use of the landmine by regular military forces is governed by international law and custom. Generally this requires the forces placing the minefields to site them in such a way as to minimize the effects on civilian populations. Armed forces must mark the limits

of the minefield to reduce the chances of civilian populations straying into it unknowingly. The minefield should be placed in such a way to present a predictable pattern to facilitate future removal. Finally, minefields should be mapped in detail to ensure removal during post-conflict operations. However, the frequency in the illegitimate use of landmines in practice, versus the lawful use of landmines, has grown over the past thirty years.

Increasingly, mines are used to deny terrain and infrastructure to large civilian populations. Mines have been placed in such a way as to deny arable land to a population with the purpose of disrupting the economic health of a county. Mines have been used to disrupt the transportation infrastructure, and to strain the health system of a nation. More importantly, for the prospects of future removal, mines are not, placed according to specific patterns, marked, or mapped. §

The net effect of this newer and more pernicious use of the landmine has been to create obstacles to the quick and efficient removal of minefields after conflict has ceased. In Bosnia-Herzegovina, ten percent of the estimated 3 million landmines, have been removed by the former warring factions across the zone of separation. The remaining landmines are in areas that were not planned to be cleared by the Implementation Force (IFOR). These landmines will need to be cleared by some other follow-on entity in order for the redevelopment of the nation, such as it is, to be successful. The slow process of removing all the landmines from a nation will present a cost to the nation afflicted, and to the international community assisting in that nation's redevelopment after conflict.

The costs associated with a landmine problem will be staggering. Removing them worldwide will cost an estimated \$33 billion dollars. Not only are the financial costs

associated with removing the landmines great, but the human costs to those injured by landmines in terms of physical and psychological suffering and long term medical care are unfathomable. The medical costs for the world's landmine victims are projected to top \$750 million dollars.¹¹

Fifty people in Bosnia-Herzegovina are injured in landmine detonations per month. Five to fifteen people die from the results of those injuries. The vast majority of the victims are farmers, about a fifth of the victims are children. The victims that do not die will present a burden on the medical system. The majority of mine victims in Bosnia-Herzegovina are between twenty and forty years old with a projected disabled life of 35 years. During this 35 years they will require their prosthesis to be changed eight times. Using this data, each victim is projected to require \$9622 dollars in medical reconstructive costs over their lifetime. Just to deal with the current registered landmine victims, in the former Yugoslavia, will require an estimated \$27 million dollars. These figures do not take into account the future landmine victims over the next few decades that it will take to remove all the landmines within Bosnia-Herzegovina. Not only will the direct medical costs to the nation be staggering, but the cost, in terms of human suffering and psychological injury, will be an impediment to the nation trying to rebuild itself after years of conflict.

The victims of landmines are most often farmers and herders who require physical fitness in order to earn a living. To compound the problem of lost income, in most developing nations, the families of those who are hospitalized may have to relocate many hundreds of miles so that the person hospitalized can be fed and his basic needs can be

met. In most instances, the individual victim and their families will have to spend up to two and a half times their average annual income on costs associated with their landmine injuries. ¹⁴ This will place a burden on the nation, economically and socially, creating, instability and upheaval. In order for a nation to be truly stable, especially an agrarian nation, the individual farmer and his family must be free from the fear of stepping on a landmine.

Landmines will cause physchological scars on a nation that will need to be removed in order for the nation to return to a pattern of discourse and trust in its social and political life. The presence of landmines in a region will cause fear and uncertainty.

This fear and uncertainty must be removed in order for the nation to continue on its process of psychosocial healing. Kimberly Maynard, a specialist in humanitarian assistance and repatriation of refugees, has studied the effects of local violence on a community. In this, a community will not be able to function normally until five phases of "healing" take place. The first phase is establishing safety for the individual, which is defined as removing danger and replacing it with security. This is the critical first step before the next four steps can occur.

Clearly if the danger of landmines is palpable within a region the process of psychosocial healing within a nation cannot take place. This will be a hindrance to a nation in the process of rebuilding itself after conflict.

The costs to the nation, inflicted with a landmine problem will be crippling. Lost productivity and reduced Gross Domestic Product (GDP), associated with lost infrastructure and agricultural capacity, will create higher prices possibly leading to inflation. High unemployment will result from agricultural lands lost to landmine

contamination, leading many to migrate from rural areas to urban areas, placing strains on an already fragile, and in most cases non-existent social welfare system.¹⁷

Most often, the places that present a lucrative target to combatants in conflict are more likely to be the places that will be infested with landmines. The very reason these places present a lucrative target, in that, they are essential to the vitality and economic well being of a country, means that their use after the conflict will be essential to the economic redevelopment of the nation. Some types of places that will see heavy use of landmines, by both sides in the conflict are roads, railroads, bridges, agricultural land, grazing land, and energy production and distribution facilities.¹⁸

In the early phases of a peace operation the landmines that have been placed on key roads and terrain, such as, a zone of separation, will be removed either by the belligerents, the military contingent of the peace forces or a combination thereof. This is due in part to a cease-fire mandate directing the parties to allow freedom of movement and to provide force protection to the military contingent of the peace forces. However, landmines will probably remain on essential infrastructure, agricultural lands and other economically essential terrain. The landmines that remain may take many years to remove and the military contingent of the peace force will have redeployed long before the entire nation can be demined.

The consequences of not removing the landmines from economically essential terrain can be devastating. In Mozambique a 1,300 mile road was shut down, due to the presence of 25 mines, effectively hampering commerce until the landmines could be removed.²⁰ In rural villages surveyed in Afghanistan, eighty percent of the families found

landmines in the fields they traditionally cultivated, effectively blocking their efforts to plant their crops. In addition, mined irrigation systems in those areas reduced available agricultural land by another sixteen percent. In Afghanistan, the GDP of \$200 per capita, originates primarily in the agricultural sector which comprises two thirds of the total. Any major loss of agricultural land will have a devastating effect on the national economic health. Yet that nation will require the economic means to rebuild itself and rid its lands of landmines. The economic resources required to remove the landmines may have to be provided by the international community.

The loss of agricultural and grazing capacity will cause an unintended shift of the population from rural areas to the urban areas that may have been cleared of landmine contamination or may have been never contaminated in the first place. In Mozambique, the mining of roads, and agricultural lands reduced, the capability of the farmers to transport their goods to market, and the amount of goods they could sell. This caused a large block of the rural population to move from rural areas into urban and peri-urban areas. The net result of this migration has placed pressures on the fledgling government and the international relief agencies within the country to provide for basic needs. The future result of this could lead to massive instability and increase the likelihood of conflict again.²³ In order for a nation to reach long-term stability the landmine contamination must be removed.

The landmine problem in most nations emerging from years of conflict will be so extensive that removal will often take decades. Landmines from World War II are still cleared from the Middle East and Europe today.²⁴ Those landmines were placed

according to a regular pattern, mapped, and marked. However, over time mines shift, maps get lost, and markings rust. Generally, the longer it takes to clear landmines the more difficult it will be to remove the landmines. After Operation DESERT STORM, the Kingdom of Kuwait cleared the 728 square kilometers of minefields, and the 1.6 million mines within them, at a cost of \$700 million dollars. Most countries cannot afford that type of clearance program so they must be prepared to invest the time required to rid their nation of the landmine problem. At the present clearing rate in Afghanistan this, slow, painstaking, process could take over twenty years to complete. 26

Most nations that have a landmine problem have been involved in conflict either internally, fighting a counter insurgency, or a civil war, or externally, such as fighting a border dispute. Third party military forces, or peacekeeping forces, are often placed under international mandate to enforce or monitor cease fires. Often under this mandate, these peacekeeping forces will work to remove landmines that remain after the conflict. The demining may end when the peacekeeping forces leave, such as in Somalia under UNISOM II.²⁷ Considering that most military aspects of peace operations will only last about two to three years²⁸it is hard to expect the peace forces to complete the task of demining a region, after conflict, when the task may require twenty to thirty years to complete. However, it will be critical that the peace forces start demining initially and then plan to transition the demining program to a long-term, self-sustaining, efficient, local demining program that can carry the demining of the nation to its conclusion.

The problem presented to the nation contaminated with landmines will not be solved in a few years. Peace operations may be successful in causing the warring factions

within a region to stop fighting but the landmines that remain may not be completely removed for decades. The lasting effect of landmines on the national psyche, health-care system, economic development, and social structure demand that they be removed. For if the landmines are not removed the nation will not be able to rebuild itself after conflict and the forces of instability may cause it to enter the abyss of instability after the military component of the peace forces have departed.

III. Landmines and Post-Conflict Development

"But to rebuild a society is a far more complex and complicated process than to simply separate armies. The latter can be done according to maps and with fixed timelines. The former requires a patience that is difficult to fit into plans, and involves challenges and efforts in areas as diverse as society itself." Carl Bildt²⁹

Landmines will present a major obstacle in the way of "peacebuilding," or post-conflict development, of a nation. Landmines may have already presented an obstacle to the peacekeeping forces. The peacekeeping forces were probably better equipped and trained to deal with the problem, presented by mine contamination, than the civilian agencies involved in peacebuilding. Yet the larger threat posed by landmines, as was seen in the previous section, is to those areas of a nation's life that is most essential to post-conflict development. How will landmines affect post-conflict development and what part does demining play in rebuilding a nation?

To understand how the landmine will affect post-conflict development, there must first be an understanding of what post conflict development is. Development, is a long-term process that is used to raise groups from a position of deprivation, to one of well being, and security. Development, is an interdisciplinary process that improves the

capacity of a society to function. This includes the physical, material, social, organizational, and motivational aspects of society. Development attempts to work at the root causes of problems and solutions rather than the symptoms.³⁰ This can be contrasted with humanitarian aid that is often associated with peace operations. Often, humanitarian aid is of an emergency nature and seeks to solve a symptom of a problem. Thus, during the famine in Somalia, humanitarian aid, in the form of food was rushed in, rather than the implements to plant food. Humanitarian aid solves the immediate crisis, however the root cause may still be present.³¹

The landmine will be an impediment to both humanitarian aid and development. However, the approach and the timing in which the obstacle is removed will be different. In overcoming the landmine obstacle presented to those involved in the rendering of humanitarian aid often it will be sufficient just to clear the landmines from the roads and refugee holding areas. In overcoming the other obstacles to long-term development landmines will need to be removed from the entire region in order for the nation to move from insecurity to security, and from deprivation to well being.

During the period that humanitarian aid will be delivered, often an international peacekeeping force will be in place to provide freedom of movement.³² The mandate may direct the force to clear landmines from the roads leading to the areas requiring aid. Often during long-term post conflict development there will be no peacekeeping force to turn to for demining. Once the crisis, immediately following conflict, has passed the international peacekeeping force will redeploy home.³³ The period of post-war development may last decades depending on the level of deprivation of society. If the region is to return to

stability, development will have to focus on the underlying root causes of instability, and will take time to be successful.³⁴ There must be a mechanism in place to ensure that demining, if it has started during the rendering of humanitarian aid, should continue for the period of post-conflict development until the landmines are removed from the nation.

How will the military forces be involved in the long-term post conflict development of a nation? The military forces, associated with peacekeeping operations, will not be in the lead of long term development. When the peacekeeping operation has ended, the military will often leave and the International Organizations responsible for long-term development will be in the lead. In some instances, military capability may still be required to enable the long-term development of a nation to be successful. This was seen following World War Two when allied military forces provided security, albeit in a much reduced form, for the agencies and governmental authorities reconstructing Europe and Japan.³⁵

Some military capability may be required to ensure the long-term success of a demining program that may have been started during the initial stages of a peace operation. The military component may have the expertise to train local deminers, it may have the database that has the location, types, and composition of minefields in country. This may have been developed from extensive survey conducted by the engineers associated with the peace forces. The military may have the capability to conduct mine awareness education and information dissemination. The military component may have developed extensive contacts and personal relationships with the NGOs that conduct demining. Thus, the military component of the peace operation may be best placed to

coordinate the actions of many organizations to include international, military, local governmental, and private in the conduct of demining during the period of transition from the peacekeeping operation to the long-term post conflict development.

There is clearly a need to transition the humanitarian actions of emergency aid, and peacekeeping, to a long-term sustainable development program, associated with "peace building." The key to this process lies in persuading the society that peace is a long journey that has interconnected, multifaceted, aspects.³⁶ The International Community, and the peace forces must get all parties to honor their commitments to peace and to take ownership, with assistance from the international community, for the long term development of the nation.³⁷ In order for the transitional period to be successful there needs to be effective coordination among military forces, the International Organizations implementing humanitarian assistance and post-conflict development, and other International Organizations, such as the World Bank and the International Monetary Fund (IMF).³⁸ The product of coordination among the agencies should result in a strategic vision for the political, military, social, and economic aspects of post-conflict development. This vision will provide a campaign plan for a successful return to stability in the region. Removal of landmines will play a large supporting role in ensuring the success of that vision.

Landmines will present an impediment to the long-term post conflict development of a nation. The solution to the problem presented by landmines, as with all other problems that pose obstacles to post-conflict stability in a region, will require an interdisciplinary approach to solve. This will require all the instruments of national power,

diplomatic, informational, military, and economic to orchestrate their efforts. In the transition from peacekeeping to long-term development it will be essential that all parties, to include, International Organizations, military forces, regional governments, and interested Non-Governmental Organizations coordinate their actions to achieve a strategic vision to solve the root causes leading to conflict. The product should be a campaign plan that will attack obstacles in the way of achieving that strategic vision, to include landmines. To do otherwise will be to risk the effort in demining already accomplished by the initial peace forces. If there is no coordinated demining campaign plan in place, the other developmental actions may accomplish no more than to provide emergency aid to treat a symptom, rather than to treat the underlying disease.

IV. United States and United Nations Policy on Demining

"We must act so that the children of the world can walk without fear on the earth beneath them." President Bill Clinton³⁹

The imperative to conduct humanitarian demining during peace operations and following peace operations during post-conflict development must originate with the National Command Authority, the President and the Secretary of Defense. In addition, the Congress will play a part in establishing United States policy on humanitarian demining in their constitutional role of regulating the armed forces of the United States. The development of this policy will be shaped, by international events, and the increasing connection between demining and peace operations conducted by the United Nations.

The current United States policy on humanitarian demining was described by President Clinton during the remarks he delivered accompanying the Antipersonnel Landmines Initiative in May 1996:

...as we move forward to prevent the minefields of the future, we must also strengthen the efforts to clear those that still exist today...To help end the anguish they cause, the Department of Defense will expand its efforts to develop better mine detection and mine-clearing technology for use in the many countries plagued by mines. We will also strengthen our programs for training and assisting other nations as they strive to rid their territory of these devices. 40

The policy as proclaimed by the President includes increasing research and development in detection and clearing technologies but, more importantly, training and assisting in humanitarian demining. The President was also clear that the United States would help nations that were willing to help themselves remove landmines.

The President, in his statement, also promised to work with the Congress on the issue, to secure the funding necessary to provide assistance in removing landmines from the lands of other nations. ⁴¹ To this end Congress had already directed the Department of Defense in the National Defense Authorization Act for Fiscal Year 1996 to provide assistance in the removal of landmines as part of the General Humanitarian Assistance Program. ⁴²

In addition, after the President's remarks, a bill was introduced in the House that directed the President to implement a program that would provide assistance in

humanitarian demining, through the Department of Defense, Department of State, and the Agency for International Development. Through this program, not only would nations be eligible for assistance but, International Organizations, Non-Governmental Organizations, and the United Nations, would be eligible for training, advice, and financial assistance. ⁴³ Presumably, this assistance would be available to nations involved in post-conflict development, and in removal of landmines associated with that development. This assistance is not tied to any specific United States participation in peace operations. This bill allows the use of United States military personnel in a training and advisory capacity only. ⁴⁴ The proposed *Landmine Removal Assistance Act* will provide the United States the capability to train and assist nations, involved in post-conflict development, and in removal of landmines, long after peacekeeping forces have departed. This is a very helpful tool available to country teams involved in transitioning demining programs, associated with peace operations to long-term demining programs, thus assisting the international community in long-term post conflict development.

The Department of Defense will take the policy, as stated by the President, and combine it with the directives of Congress to establish a policy on humanitarian demining for the Department of Defense. The Department of Defense had already established policy regarding humanitarian demining in 1994. In this policy, which is an element of the Overseas Humanitarian, Disaster, and Crisis Assistance program, the Department of Defense would provide assistance in humanitarian demining to other nations, including mine awareness, mine clearance, support and research and development. The goals of the policy are to involve the nation, afflicted with landmine contamination, in the solution to

the problem, and seek their long-term commitment to removing the landmines. Host nations eligible to receive assistance under this program have to meet certain criteria to include: being relatively stable; willing to accept United States assistance; free from further hostilities; demining assistance should support and advance United States interests in that nation; and demining should make a difference in national redevelopment. 45

The Department of Defense humanitarian demining program will be administered by the regional Commander In Chief's (CINCs), in conjunction with, the country team⁴⁶.

The CINC is directed to coordinate actions with other United States government agencies, the United Nations, and other third party nations that may be involved in humanitarian assistance in the region.⁴⁷ The CINCs are further directed that as soon as practical, responsibility for supervision, assistance, and financial assistance of the demining program should be handed over to host nations, the United Nations, or Non-Governmental Organizations.⁴⁸ The entire Department of Defense program is established to provide interim assistance, and is not established to provide long-term humanitarian demining.

The fact that the Department of Defense demining program provides only interim assistance may not be fatal to the long-term success of the demining campaign, if the military is not the only instrument of national power involved. The diplomatic instrument should be working with the Bretton-Woods organizations, especially the World Bank, to ensure that there is some type of long-term loan available to the nation afflicted with landmine contamination to fund landmine clearance. The economic instrument of national power may have to assist in this. The fact is, long-term humanitarian demining is expensive, in this regard the international community needs to assist the nation afflicted,

for they will not be able to go it alone. Even with the Department of Defense assisting, the amount of assistance will not match the financial requirements associated with removal of millions of landmines from a region.

How the CINCs will coordinate this assistance will vary with each situation.

However, there has been previous experience in providing humanitarian demining assistance during United Nations peace operations. Some of this experience has worked and some has not. There is much to be learned from both successful and unsuccessful experience. Currently, the CINCs execute the Humanitarian Demining Program through the use of Special Operations Forces. These units go in, conduct mine clearance and mine awareness training, and then leave. However there is no doctrine or precedence in the United States military regarding the coordination of long-term demining and providing long-term technical assistance.

There is experience in providing assistance during United Nations peace operations. The United Nations has conducted demining, in conjunction with many of its peace operations, in the last decade. The only two criteria for eligibility to receive United Nations assistance are a willingness to assume ownership of the program and consent to have United Nations forces and organizations conduct demining. The United Nations will place the task to initiate humanitarian demining in the mandate of the peacekeeping force. ⁵⁰

During the initial stages of the demining effort United Nations peace operations forces will conduct training in mine awareness for the local civilian population. The peace force will also initiate training of deminers, who are often former soldiers, thus assisting in

demobilizing the army and providing jobs for the regional economy. The peace force will conduct detailed surveys to determine the locations of the minefields, often using local Human Intelligence (HUMINT) to assist the survey teams. Based on these surveys priorities for demining areas will be established. The priorities are established based on the operational needs of the United Nations forces, and the requirement to open essential infrastructure, and the need to restore the basic revenue earning capacity of the nation. 51

Once the peace forces, involved in the initial demining program, have created a local demining capacity, augmented with Non-Governmental Organizations, the supervision, and administration of the program can be transitioned to the government of the nation concerned. As more local deminers are trained, and gain experience in supervision and administration, the Non-Governmental organizations, and third party nationals involved in the program, can be replaced. Eventually, the goal is to have the entire demining program under the control of the local government affected. ⁵²

To cause this to happen requires much coordination among the various. International Organizations, Non-Governmental Organizations, and local government officials, not to mention, coordination within the peacekeeping forces and respective country teams themselves. In most instances, the United Nations has shared this coordination responsibility among the military and civilian branches of its mission incountry. The military would focus on the actual operation of the program, while the civilian branch would set priorities and raise financial donations to fund the program. This approach will work as long as there is a peacekeeping operation in place.

However, in long-term post conflict development often the peacekeeping force has departed and the demining must continue on. Yet there may not be the capacity incountry to provide guidance, administration, financial management, nor technical advice immediately after the peacekeeping forces have departed. It will be in these circumstances that some type of assistance will be required. This assistance may be in the form of an interdisciplinary team provided by the United Nations, or some other third party country. The goal of this team should be to train the management, coordination, and financial skills necessary for independent operation of the demining program. Progress should be evaluated on an annual basis and as the local capacity to manage the program matures, and becomes self-sufficient, the team should be removed and the nation should assume the management of the demining program itself.

The Department of Defense humanitarian demining program is shaped by the United Nations program. The program focus and goals are the same. To provide assistance to nations wanting to rid themselves of landmine contamination. The programs equip and train these nations to solve their own problem. The process as to how to implement the demining program has been "field tested" by the United Nations. The United States is about to provide assistance on a large demining campaign, in conjunction with its North Atlantic Treaty Organization (NATO) partners, in, Bosnia-Herzegovina. ⁵⁴ In order to ensure success, the program must not only include the training of a local demining capability, but there needs to be coordination and management of the program, by the United States and its NATO allies, until the government of Bosnia can be trained to perform this function. Initially the ideal organization to do this would be the Civil Affairs

units working at the operational level in Sarajevo. An interdisciplinary team may be used to coordinate effort, set priorities, and instruct the Bosnia government in the fiscal management of the program. Once the peace operation is completed, in the Summer of 1998, this function may be handed off to the Office of the High Representative, along with all the databases and minefield records. Most of this may have already happened with the establishment of a mine action center by the Office of the High Representative. 55

The policy for the United States Department of Defense to assist the nation, afflicted with a landmine contamination problem, is there. From the National Command Authority, and the Congress, the Department of Defense has been given the task to assist nations that want to rid their nation of a landmine problem. In addition, the United States military is not working in an area without precedent. The United Nations has in the past and currently conducts humanitarian demining in conjunction with its other missions. The key to successful implementation of a long-term demining program is the establishment of a national capacity to demine, to include mine awareness training for the local population, mine clearance training for deminers, coordination and efficient management at the national level to ensure proper use of often very scarce resources. This should be planned for, at the start of a peacekeeping operation, and implemented during the initial operations, so that the program may be transitioned to local control upon completion of the mandate. This program will take time and resources to ensure that all the landmines within the nation are removed. However, the investment will pay large dividends in terms of successful development and regional stability. How the international community should provide the resources to assist this investment will be a very critical question that needs to be answered before the program can be executed.

V. International Resources Required for a Demining Campaign

"... a coordinated strategy involving the UN, international lending institutions, the ICRC, and NGOs involved in mine clearance must be developed to address the immediate problem of mine removal." Jan Eliasson⁵⁶

In order for the post-conflict demining campaign to be successful there must be a total effort by the International Organizations, responsible for the developmental programs; the military forces, transitioning out of the country; and the various Non-Governmental Organizations in pulling their talents and resources together to eliminate the problem presented by landmines. It will be critical that these resources are pledged, and identified early, so that the business of removing the mines can take place quickly and efficiently. The main question that needs to be asked by those planning the demining campaign should be, what are the resources that are required to make the demining campaign successful, and who can best provide them? Financial resources will often be the most critical piece of the resource puzzle that needs to be settled first. Then the technical assistance and expertise piece may be fit after the financial resource piece has been settled. What organizations are in the best position to provide the financial resources required for demining and how will they provide them?

Prior to the end of World War Two, the Bretton Woods organizations were established to stabilize the world economy after the conflict had ended. This system included two aspects, one to stabilize the international monetary system, the International

Monetary Fund, and one to help rebuild shattered economies, the World Bank. The additional mission of the World Bank was to help nations that were once former colonies develop and modernize their economies after the war. The goal of the whole Bretton Woods system was to keep the world from a total economic collapse following the war, similar to what had happened to the world economy following World War One. The World Bank will be looked to by the international community to provide financial assistance to a nation involved in post-conflict development, and should be looked at to provide the financial resources needed to remove a landmine problem from a nation.

Immediately following conflict there is a great need for an infusion of capital into a nation in order to undertake the process of reconstruction. As seen in previous sections removing landmine contamination from a nation will be very expensive, with the cost ranging from \$200 to \$1000 per mine. The World Bank lends capital to nations involved in post-conflict development. Normally, the Bank arranges donations from other nations to back the loan to the borrowing nation. The Bank then determines the terms of the loan based on the ability of that borrowing nation to rebuild and improve its economy. In Bosnia, the World Bank is involved in establishing a fund to conduct demining, as part of its overall redevelopment package. The goal of the donated loan will be to get the national infrastructure, social, and political systems stable enough to support infusion of private capital investment. The notion being that once private capital is invested, the nation will be able to raise the capital required to repay its debt with the World Bank and the donor nations.

Establishing a source for financial resources will be essential to the successful transition of the demining program from the peacekeeping operation to one that will support the long-term development of the nation. Initially, this groundwork will have to be done by the diplomatic instrument of national power, in conjunction with the civilian agencies responsible for the long-term redevelopment of the nation, such as the Office of the High Representative in Bosnia-Herzegovina. However, at the working level the details involved in coordinating the terms of the loan, and the execution of the loan arrangements will fall to the project officers from the World Bank, or other developmental banking institutions working with the military and civilian demining action officers. ⁶² In Bosnia, this is the Mine Action Center, and the Mine Clearance Policy Group. Both these bodies are staffed by military, civilian, and local governmental officials. ⁶³

The military organization best placed to coordinate all these actors and to orchestrate the military, international, and Non-Governmental resources is the civil affairs organization supporting the military component commander of the peace operation. In Bosnia, the 353rd Civil Affairs Command did this in the initial stages of the peace operation. The command worked with the World Bank to determine the conditions of the developmental loans and also worked with the NGOs, International Organizations, and local government to determine the prioritization of the demining campaign.⁶⁴

The civil affairs organization, supporting the peace force commander, would have the mission to, coordinate with NGOs, International Organizations, and the local governments, to ensure the success of the demining campaign. Therefore, this organization is best placed to coordinate the variety of tasks associated with the execution

of a demining campaign. The organization could be augmented with a team of engineers to provide technical advice, coordinate the survey of minefields by the engineer units, and maintain the minefield database. This organization could then arrange the transition from initial demining, during the peace operation, to the long-term demining associated with development. Thus, in Bosnia, the civil affairs mine action organization, if there was one, would transition the demining program to the UN Mine Action Center. A mine action center in the civil affairs structure would bridge the gap between the military, International Organizations, and the NGOs that would support and direct demining, and would be essential to the success of that effort.

Once the key financial piece of the international resource puzzle has been pledged, and coordinated, the other critical international resource piece can be coordinated, the technical expertise provided by the Non-Governmental Organizations (NGOs). The use of the term NGOs denotes a variety of civilian organizations, to include not for profit organizations, and for profit organizations, who are generally not associated with government, international or national. Non-Governmental Organizations have increasingly provided technical expertise in the area of humanitarian demining during the last decade.⁶⁵

The Non-Governmental Organizations, involved in humanitarian demining, conduct mine awareness training, mine clearance training, administration of demining programs, and medical assistance and rehabilitation. Some of these organizations work with their own donated funds, however, most are implementing organizations with governments, and International Organizations, such as, the International Committee of the

Red Cross (ICRC) providing the funding for their efforts.⁶⁶ The Non-Governmental Organization can provide valuable technical expertise in demining that fills the void of demining experience until a local capacity can be developed.

In Afghanistan the United Nations has "built" demining Non-Governmental Organizations. These NGOs are not associated with any specific group or agency. The United Nations has the requirement and financial resources to conduct demining but, does not have the staff to execute the program. To get around the staffing dilemma, the United Nations established demining teams with demobilized ex-soldiers trained and led in demining by technically expert third country nationals. The United Nations drew up the terms of reference and created the demining teams. The United Nations sets the priorities and provides the resources. The major benefits to the program are that the program operates in spite of conflict continuing in the country and that it can quickly and efficiently "afghanize" the demining program. Once the conditions stabilize in Afghanistan the program will be transferred to the local government, whomever that might be at the time. 67

The key to successful NGO developmental relationships in demining will be the realization that there will be no formal "by the book" relationships established. Every use of NGOs to conduct demining will have to be on a case by case basis, in which relationships will have to be built, and understandings coordinated. The use of NGOs should be orchestrated early during the peacekeeping operation for the relationship to mature during the transitional, and post peacekeeping period. A single unified strategy to conduct demining over the long-term should be established early. The NGOs should be

brought in to help develop the strategy and therefore, will assume ownership, with the other agencies, of the demining program.⁶⁸ When the time comes to transition, short-term demining to long- term humanitarian demining, the NGOs will be in a position to assume direction, and work with the local Government to assist in the transition to local control.

Coordination for all the international resources required to conduct the demining campaign, after the transition from peacekeeping to long-term development, should be done by the local government, if able, or by the civilian body responsible for the overall post-conflict development program in the nation, such as, the office of the High Representative in Bosnia. The coordination and direction of the campaign at this point should not be done by the military instrument of the peace operation. However, there may be instances in which there may be a requirement for military technical expertise to deal with the mine clearance program. In these instances the local government should approach the United Nations or a third party nation and enter in to some bilateral agreement in which military technical support could be provided. This arrangement would be made for such time until that nation could develop this technical expertise among its own military or governmental staff. The Nation will assume control of the demining program once the capability can be developed to manage the technical and financial aspects of the demining campaign.

Early planning for the coordination and prioritization of the scarce international resources will be the key to a successful long-term demining campaign. This coordination should start as soon as possible once the situation during the peacekeeping operation stabilizes. All agencies involved in demining should be included in the development of the

long-term demining campaign plan. This will encourage ownership of the program by all the parties, to include the local government, and the organizations involved in providing the financial and technical resources necessary to execute the program. Coordination with these various organizations should be done, during the peacekeeping operation, by the civil affairs organization supporting the peace force commander. Once the demining campaign can be transitioned to local government control, or to International Organization control then some type of coordination cell should be established to coordinate resources.

Many of the ideas proposed in this monograph have been used during other demining campaigns in the last decade. One region that has been plagued by landmine contamination and is involved in a long-term demining campaign is Cambodia. The next section will use the experiences in Cambodia to analyze the validity of these ideas.

VI Long-Term Demining in Cambodia

"You can't develop a country, you cannot set up an infrastructure... until you resolve the demining issue. And thats the key word everybody's got to damn well understand, because if you don't resolve that issue, you're not going to resolve anything else." Lt Col. George Focsaneanu, Dir CMAC 1993⁶⁹

Cambodia emerged from three decades of conflict with a landmine problem that had affected every aspect of its society. The mines were placed by each of the multiple factions involved in the civil war that had started in the early seventies. While it may be true that the landmine problem in Cambodia is largely Cambodian, the international community owns some responsibility in the problem, since, among other factors, the vast majority of the landmines placed within the country are foreign in origin. Cambodia is a poor agricultural country with the majority of the population employed in agriculture. The

loss of agricultural land due to landmines has been estimated to be sixty percent.⁷¹
Following the period of civil war the United Nations stepped in to broker and administer a peace in 1991.

The United Nations established the United Nations Advanced Mission in Cambodia (UNAMIC) in 1991 with the purpose of maintaining the cease-fire established by the Paris Accords of October 1991, and preparing for the reception of the United Nations Transitional Authority in Cambodia (UNTAC).⁷² The UNAMIC did not initially have the task to conduct demining. The task to demine was added later by the security council.⁷³ The UNTAC was established on 15 March 1992 with the mandate to monitor human rights violations, conduct an election, perform civil administration functions, restore law and order, repatriate and resettle refugees, rehabilitate essential infrastructure, and perform military functions. The military functions included the tasks to verify the withdrawal of foreign forces and arms, supervise the cease-fire, control weapons, and provide assistance in humanitarian demining.⁷⁴ All these tasks were to be completed in eighteen months ⁷⁵

The demining component of the UNTAC mission was to continue the work already started by UNAMIC. The plan was to have the UNTAC engineers conduct mine-awareness training, mine survey, minefield marking, and mine clearance training programs. The UNTAC engineer forces were to provide assistance in mine clearance, in addition to the training for the Cambodians to conduct mine clearance on their own. The United Nations had only a limited awareness of the magnitude of the effort required to combat the

landmine problem, and the complexity of the approach required, if the entire UNTAC mandate was to be fulfilled:

The magnitude of the mine problem in Cambodia requires that a sizable and intense effort should be undertaken in the very early stages to facilitate UNTAC's deployment and manifold activities.⁷⁷

This may have been the limited view from UN headquarters in New York however, from headquarters of the UNTAC, the peace force commander had other ideas about the solution to the problem of mines in Cambodia. The commander's view was that the UNTAC would assist [emphasis mine]in the establishment of an effective program to address the Cambodian mine problem. Thus, the Cambodians would solve their "own" landmine problem rather than relying on International Community to solve it for them. The Cambodians however were not capable of conducting their own demining program yet. The Cambodians however were not capable of conducting their own demining program yet.

The Cambodian Mine Action Center (CMAC) was established by UNTAC in April 1992 for the express purpose of "Cambodianizing" the demining campaign. The thought was that that if a centralized organization, run by the Cambodians, executes the demining campaign, then the program will be "Cambodianized." This assumption was false, the Cambodians were not prepared to assume control of the humanitarian demining program. 80

The mission of the CMAC was to take the tasks from the Mine Clearance Training
Unit (MCTU) and the Mine Action Cell (MAC) both established by UNAMIC and
UNTAC respectively, and supervise the total demining program in Cambodia. The

demining program included training and supervising mine clearance, conducting mine awareness, surveying and mapping minefields, and marking minefields. The training component focused on training deminers, not the skills required to, supervise demining, to prioritize the demining effort, raise and manage funding. Thus, deminers were trained, but the leaders required to "Cambodianize" the demining campaign were not. The efforts of CMAC in spite of its failure to "Cambodianize" the demining program have been somewhat miraculous, this may be due in large part to the dedication of its expatriate and military staff, and not to the resources provided or plan of action.

Coordination for resources, both financial and technical, was one of the primary functions of CMAC. From its formation in 1992 it was envisaged by the United Nations that CMAC would assume control of the resources available for demining Cambodia. This included funding from donor nations, such as, Australia, and technical experts seconded to UNTAC. However, the UN was about to pull the plug on all resources in October 1993 when the UNTAC mandate was complete. Largely, through some intervention by the press, some NGOs, and some diplomatic channels, CMAC continued to exist hand to mouth to this day. 83

The efforts by CMAC in the conduct of humanitarian demining, assisted by NGOs, and now by, United States trained demining teams, have not kept up with the need to quickly return mined agricultural back to the public. In addition, the security situation in Cambodia has destabilized since the Paris Accords in 1991. This has produced a situation in which new landmines have been planted in areas that had been previously demined.⁸⁴
The CMAC still has not been fully transitioned to Cambodian control.⁸⁵ The success or

failure of the demining program will affect the success or failure of the overall development in Cambodia.

Landmines still plague Cambodia, as a result, the post-conflict development of the nation has been affected. Cambodia still cannot use over seventy percent of its arable land due to landmines. Between three hundred to five hundred people are killed by landmines in Cambodia each month, placing a burden on an already overstressed medical system. Cambodia ranks number 147 out of 173 countries measured in the United Nations Development Programme, Human Development Index. In some areas food deficits are avoided through international relief. All this circumstantial evidence points to what one member of the NGO community voiced a few years ago:

...places just die because of landmines; the land is dying, the villages are dying. You can send millions of dollars, you can send NGO workers to train people to grow more rice, but if they cannot go into their fields, if they cannot transport their rice from one point to another, nothing can happen, absolutely nothing... 89

There is a definite connection between the success of the demining campaign and the success of the long-term development program. Until the priority demining of Cambodia, to include its essential infrastructure and agricultural lands, can be completed the long-term development of the nation will not be able to move forward. This will be a factor that may cause the country to return to political and social instability.

What are the lessons learned from the Cambodian demining experience and can they be applied to the ideas developed about long-term demining? First, long-term

demining must be planned for early in the peace operation. This did not take place in the UNAMIC and UNTAC experience. The notion that the peace forces had to deal with landmines was an afterthought. The result was an Ad Hoc organization with no unifying vision and strategic plan.

Second, the long-term demining campaign must be developed with the many organizations that will be essential to the success of that campaign. This would include International Organizations, such as the World Bank, NGOs, and the military forces representing the peacekeeping forces. The initial effort at developing CMAC was driven from the top down. There was no coordination with all interested parties to develop a long-term demining campaign plan therefore, there was no ownership of the demining campaign by all involved.

Third, there should be a coordinating agency responsible for the demining effort from the start of the peace operation. The UNAMIC and UNTAC demining organizations were buried in the engineer structure. These organizations were not designed, or mandated to coordinate actions with local governments, NGOs, and International Organizations. The engineer forces can provide great technical expertise in training demining and surveying minefields, but are not best suited for coordinating financial or NGO resources to leverage scarce peacekeeping resources. Civil affairs organizations are best designed for the type of coordination demanded to ensure the success of a humanitarian demining campaign.

Despite the organizational flaws of the UNAMIC and UNTAC demining effort the program has been somewhat successful due to the dedication and resourcefulness of the

CMAC staff. In Cambodia, there will continue to be a requirement for long-term demining well into the foreseeable future. Ownership of the program by the local government will not happen overnight, it must be transitioned through training and development of local leadership. Often the skills demanded of a leader of a demining program will be gained through experience and this will take time. Planning the demining campaign early can ensure this transition will take place smoothly and efficiently. Coordination at the peacekeeping force headquarters level will be essential to successful execution of the demining campaign.

VII Conclusion

"Mines pose a strategic, operational and tactical dilemma." $CALL^{90}$

Landmines will affect every aspect of a society emerging from conflict for several decades. The solution to the landmine problem will be complex and will require the skills of many. Yet, if a nation is to successfully rebuild its society after war the landmines must be removed.

The United States military will find itself involved in peace operations in failed nations that have been plagued by landmine use during internal conflict. Most often the peace operations will last only a few years and then the military component of the peace operation will leave, only to be replaced by civilians from International Organizations and NGOs responsible for rebuilding the nation. For the long-term rebuilding effort to be successful the landmines within the nation must be removed.

The peace operations forces will most likely start surveying and mapping the minefields within the nation. Clearing those minefields that will affect the deployment and operations of the peace force. The peace force engineers, assisted by NGOs will probably start training former soldiers to be deminers. The informational instrument of power will initiate a mine awareness campaign for the general population.

For all this effort to be successful, all the separate humanitarian demining actions must be complementary and work with one single unifying vision. The approach to demining the country should be systemic and should leverage all the resources available to the peace forces. This will require a demining campaign plan built by all the organizations and governments that will be involved in demining. A coordinating cell will be required to orchestrate all the resources in execution of the campaign plan.

During the peace operation the United States forces has an organization that is ideally suited to coordinate the resources required to solve complex humanitarian issues, such as landmines, the civil affairs unit. This organization could, with augmentation by engineers, direct the effort of the peace force engineers in minefield survey; coordinate the training of deminers by special force units, and NGOs; prioritize demining effort, based on guidance by the peace force commander, and in consultation with UN, or host nation authorities; track the demining effort using computerized data bases; coordinate with the psychological operations forces, NGOs, local government, and media to conduct a mine awareness campaign for the local population. In addition, this organization would be well placed to transition the long-term demining program to local authorities once the peace forces depart.

The civil affairs mine coordination cell could immediately start identifying and training the future local leaders of the long-term demining effort. This would be done in conjunction with the units and NGOs involved in training the deminers. These future leaders would be brought in as soon as practicable to work side by side with the members of the mine coordination cell. They would be trained to prioritize the demining effort, and coordinate with the local governmental leadership. The future leaders would be introduced to those International Organizations involved in funding the demining effort. They would be taught how to secure long-term financing and how to manage those financial resources.

The United States forces involved in peace operations in the future will probably face the scourge of landmines. Essential to a successful exit from the peace operation will be a successful transition of the short-term mine clearance program to a self-sustaining long-term demining program. A successful demining campaign will be essential if the nation is to be successful in rebuilding its society in all aspects, economic, political, social, and psychological. For the nation to return to some type of stability and normalcy, the legacy of war, the landmine, must be removed. Otherwise, the international community may have to deal with internal strife in that region for decades to come.

Demining will require a modest investment in manpower, capital, and time by the international community. The dividends provided by that investment in the long-term may lead to peace and stability in the region. The investment to demine a nation will not payoff overnight. The international community must be prepared to be patient and stay the course. Persistence is essential if the international community is to be effective in

removing landmines from a region. The nation afflicted should not be left to remove the landmines alone, a landmine problem is not just a Cambodian problem, or a Bosnian problem, but an international problem, that will require an international solution.

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